

✓ 1st ✓ 2nd class / sub different.

THE UNIVERSITY OF CHICAGO

a voice band return loss means monitoring said voice and data signals and generating a voice band return signal to be forwarded to said connection point, said return signal being a representation of said voice band signal; and

2. A termination circuit for a subscriber line interface connected to a transmission medium for bi-directional communication of both voice and data signals, said termination circuit comprising:

a data band return loss means monitoring said voice and data signals and generating a data band return signal to be forwarded to said connection point, said data band return signal being a representation of said data band signal; and

3. A termination circuit for a subscriber line interface connected to a transmission medium for bi-directional communication of both voice and data signals, said termination circuit comprising:

a voice band return loss means monitoring said voice and data signals and

generating a voice band return signal to be forwarded to said connection point, said return signal being a representation of said voice band signal;

5 a data band return loss means monitoring said voice and data signals and generating a data band return signal to be forwarded to said connection point, said data band return signal being a representation of said data band signal;

a voice band filter connected to said return loss means said voice band filter isolating said voice band return loss signal from said data band signal; and

a data band filter connected to said return loss data band means, said data band filter isolating said data band return loss signal from said voice band signal.

10 4. A termination circuit as defined in claim 1, wherein said communications medium is a twisted copper pair.

5 5. A termination circuit as defined in claim 1, wherein said bi-directional communication is implemented utilizing a Digital Subscriber Line (DSL) scheme.

20 6. A system for canceling a transhybrid component and a near end echo from a data band signal at an communication system interface for bi-directional communication of voice and data band signals over a common communication medium, said circuit comprising:

an analog circuit to estimate said transhybrid component value and said near end echo value and to subtract said estimated values from an incoming data signal; and

an analog data band filter to restrict the estimation to said data band signal.

25 7. A system as defined in claim 6 having an analog to digital converter for digitizing said incoming data signal after said transhybrid component and near end echo have been canceled.



